

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/010807

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> H01M8/02, H01M8/10, C08J5/22, C08L71/10, C08G65/40, C08G65/48

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> H01M8/02, H01M8/10, C08J5/22, H01B1/06, C08L71/10, C08G65/40, C08G65/48

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2004  
Kokai Jitsuyo Shinan Koho 1971-2004 Jitsuyo Shinan Toroku Koho 1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	WO 02/25764 A1 (VIRGINIA TECH INTELLECTUAL PROPERTIES, INC.), 28 March, 2002 (28.03.02), Page 8, line 5 to page 9, line 20; page 22, line 17 to page 24, line 6 & US 2002/0091225 A1 & JP 2004-509224 A	1, 14, 15 2 3-13
X Y A	JP 8-20716 A (Hoechst AG.), 23 January, 1996 (23.01.96), Par. Nos. [0006], [0021] to [0026] & EP 688824 A2 & DE 4422158 A1 & US 5834566 A	1, 14, 15 2, 16, 17 3-13



Further documents are listed in the continuation of Box C.



See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search  
05 November, 2004 (05.11.04)

Date of mailing of the international search report  
22 November, 2004 (22.11.04)

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International application No.

PCT/JP2004/010807

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	JP 2002-524631 A (VICTREX MANUFACTURING LTD.), 06 August, 2002 (06.08.02), Claims 23 to 26; Par. Nos. [0002], [0037], [0083] to [0086]; Fig. 1 & WO 00/15691 A1	1, 14, 15 2 3-13
A	JP 2001-514431 A1 (Foster-Miller, Inc.), 11 September, 2001 (11.09.01), Par. Nos. [0033], [0048], [0049], [0064], [0068], [0090], [0154], [0158]; table 1 & WO 99/10165 A1	3-12
A	JP 2002-502539 A1 (The Research Foundation of the State University of New York), 22 January, 2002 (22.01.02), Page 17, lines 11 to 25; page 19, line 18 to page 20, line 11; page 22, 3rd line from the bottom to page 23, line 11; table 2 & US 5989742 A & WO 97/24777 A1	4
Y	JP 11-67224 A (Asahi Chemical Industry Co., Ltd.), 09 March, 1999 (09.03.99), Claim 6; Par. Nos. [0041], [0042], [0047] (Family: none)	2, 16
Y	JP 11-7969 A (Asahi Chemical Industry Co., Ltd.), 12 January, 1999 (12.01.99), Par. No. [0050] (Family: none)	17
P, A	JP 2004-149779 A (Toyobo Co., Ltd.), 27 May, 2004 (27.05.04), Claims 1 to 10; Par. Nos. [0068], [0069] (Family: none)	11-13
A	JP 7-268114 A (Asahi Glass Co., Ltd.), 17 October, 1995 (17.10.95), Par. No. [0013] (Family: none)	13
A	JP 1-129023 A (Tosoh Corp.), 22 May, 1989 (22.05.89), Page 2, lower right column, line 6 to page 3, upper left column, line 6 (Family: none)	13